

Session 5: Summary

Sources of Systematic Errors

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International Workshop on Laser Ranging
Canberra, Australia 2018

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- The session began by looking at time bias at stations as detected in results from the T2L2 mission. This feedback to stations has been informative, reliable and very valuable. Timing at the Wettzell station was then described in detail.
- Igor Ignatenko looked at the influence of local atmospheric conditions on SLR range error.
- As well as estimating range bias for LAGEOS, Daniel Koenig estimated range bias for the Etalon satellites to monitor the behaviour. At the current stage of processing, however, it does not result in an improved TRF solution.

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- The aim for 1-mm ranging is a challenge for the ILRS. Removing bias at the station is important, but the remaining bias can be solved for in the analysis. Also, it is important to remember that stations with low single-shot precision **can still contribute** if enough data points are collected.
- Feedback to stations is valuable and stations should take this information on board. Two talks showed different methods developed to respond to a range residual dependency on normal point RMS. One from Wettzell used a deconvolution, Wiener filter to consistently define a point on the satellite response. And Herstmonceux used fixed, tight clipping about the LEHM.
- John Degnan presented a method for threshold detection to avoid multi-photon bias so that kHz stations can operate efficiently at high return rate.